



ZS4-SF-R Screw Clamp Terminal Block

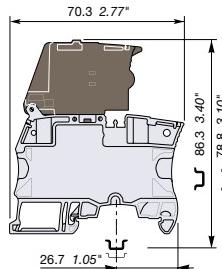
Fuse



4 mm²
10 AWG

6 mm 0.236 in Spacing

Features and Benefits



- Protect your circuits with 5x20 fuse terminal blocks compliant with IEC 60947-7-3 standard (fuse not supplied with the terminal blocks),
 - Simplify the distribution thanks to the two jumper channels aligned with ZS4 feed-through and ZS4-S-R1 disconnect terminal blocks,
 - Quickly identify the defective circuit thanks to the blown fuse indicator (with leakage current < 0.5 mA).

3D CAD outline drawings available on "Control Product 3D" portal

Ordering Details		Type	Order Code	EAN Code	Pack ^(ing)	Weight g (1 pce)
Grey-Dark Grey	■	ZS4-SF-R1	1SNK 506 412 R0000	3472595064120	50	18.60
Grey-Dark Grey	■	ZS4-SF-R3	1SNK 506 415 R0000	3472595064151	50	18.60

Declarations and Certificates

Document Part Number

General Information

The following information must be strictly adhered to in order to guarantee the terminal block electrical, mechanical and environmental performance.

Protection		IP 20	NEMA 1		
Rail		DIN3-TH35			
Wire stripping length		10.5 mm	<i>0.413 in</i>		
		Screw clamp		Screw rail contact (Maximum value)	
Operating tool		Flat screwdriver			
		3.5 mm	<i>0.138 in</i>		
Torque		0.6 Nm $\pm 0.1 \text{ Nm}$	<i>5.31 lb.in</i> $\pm 0.885 \text{ lb.in}$	$\pm 0.1 \text{ Nm}$	$\pm 0.885 \text{ lb.in}$
Mechanical endurance of disconnect system					

Material Specifications			
Insulating material	Polyamide		
IRC	600 V		
Flammability	UL94 NF F 16 101	V0 I2F2	
	Needle flame test IEC 60695-11-5	Compliant	
Connecting capacity per clamp			
1 Rigid conductor	0.2-4 mm ²		24-10 AWG
1 Flexible conductor without ferrule	0.22-4 mm ²		24-10 AWG
1 Flexible conductor with ferrule	0.22-4 mm ²		24-12 AWG
Ferrule maximum outer diameter		5.5 mm	0.216 in
Multi Connecting capacity per clamp			
2 Rigid conductors	0.2-1 mm ²		24-18 AWG
2 Flexible conductors without ferrule	0.22-1 mm ²		24-18 AWG
2 Flexible conductors with twin ferrule	0.22-1.5 mm ²		24-16 AWG
Don't mix solid and flexible conductors in the same clamp			
Don't mix solid or flexible conductors of different sizes in the same clamp			
The "Connecting capacity with ferrule" data is guaranteed with ABB crimping tool PS-3			
Cross section			
Rated cross section	4 mm ²		10 AWG
Maximum Cross section	Manufacturer data	4 mm ²	Manufacturer data
Gauge	A3-B3 / 3 mm / 0.118 in / IEC 60947-7-1		
Electrical characteristics			
Current			
Rated current		IEC 60947-7-1	6.3 A
	Field and factory wiring Cat.2	UL 1059	6.3 A
	Factory wiring Cat.1	UL 1059	6.3 A
		CSA-C-22.2 n° 158	6.3 A
Rated short-time withstand current 1 s (lcw)			480 A
Short-time withstand current	0.5 s	Manufacturer data	
	5 s	Manufacturer data	
	10 s	Manufacturer data	
	30 s	Manufacturer data	
	1 mn	Manufacturer data	
Rated short circuit withstand		CSA-C-22.2 n° 158	
Max. current (45° temperature increase) / Max. cross section (mm ²)		Manufacturer data	6.3 A 4 mm ²
Maximum short circuit current (1s)		Manufacturer data	480 A
Short Circuit Current Rating (SCCR) SA UL 1059 supplement			SCCR UL 1059
With the following configurations:			
	Maximum voltage		
	Suitable conductor wire range		
	Fuse rating		
	Fuse designation		
	Fuse manufacturer name		
	Fuse type		
	Short circuit current		

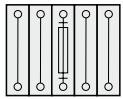
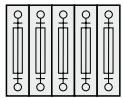
Voltage

Rated voltage	IEC 60947-1	250 V
Rated voltage	UL 1059	150 V
Use Group	UL 1059	D
Rated voltage	CSA-C-22.2 n° 158	150 V
Rated voltage Ex e	IEC/EN 60079-11	
Rated impulse withstand voltage		6000 V
Dielectric test voltage		1890 V
Pollution degree	IEC 60947-1	3
Oversupply category	IEC 60947-1	III

Dissipated power

Maximum dissipated power at rated current	IEC	
---	-----	--

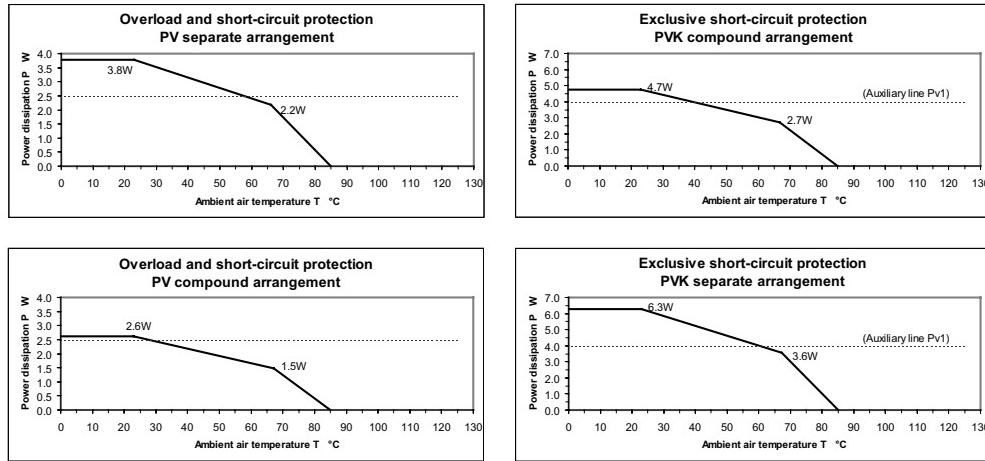
Rated power dissipation at an ambient temperature of 23 °C - IEC 60947-7-3

Overload and short-circuit protection Separate arrangement		2.5 W
Exclusive short-circuit protection Separate arrangement		4 W
Overload and short-circuit protection Compound arrangement		2.5 W
Exclusive short-circuit protection Compound arrangement		4 W

Temperature range

Ambient temperature min/max	Storage	-55 +110 °C	-67 +230 F
	Installing	-5 +40 °C	-23 +104 F
	Service	IEC 60068-2-1	-55 +110 °C
		EN 60079-7	-67 +230 F

Current Derating curve for continuous service temperature



Environmental Characteristics

Additional climatic tests

Dry heat	IEC 60068-2-2	Compliant
Conditions	Temperature	+100 °C
	Duration of test	96 h
Cyclic damp heat	IEC 60068-2-30	Compliant
Conditions	Temperature	+55 °C
	Number of cycles	2
Cold	IEC 60068-2-1	Compliant
Conditions	Temperature	-40 °C
	Duration of test	96 h
Z/ABDM climatic sequence	IEC 60068-2-61	Compliant
Conditions	Dry heat Duration of test / Temperature	16 h +85 °C
	Cyclic damp heat Number of cycles / Temperature	1 +55 °C
	Cold Duration of test / Temperature	2 h -25 °C

Corrosion

Salt mist	IEC 60068-2-11	Compliant
Conditions	Duration of test	96 h
	Concentration	5 %
SO2	ISO 6988	Compliant
Conditions	Duration of test	48 h
	Concentration	0.2 dm³
Sulfur dioxide	IEC 60068-2-42	
Conditions	Duration of test	
Hydrogen sulfur	IEC 60068-2-43	
Conditions	Duration of test	
Flowing mixed gas corrosion test	IEC 60068-2-60	
Conditions	Number of the test method	
	Duration of test	

Vibrations

Vibrations	IEC 60068-2-6	Compliant
Conditions	Frequency range	10-55 Hz
	Number of cycles	10
	Amplitude	
	Acceleration	10 m/s²
Random vibrations and climatic sequence	IEC 60068-2-64	
Conditions	Duration of test	
	Frequency range	
	Acceleration	
Climatic cycles		
Step 1 -> Temperature / Duration of test		
Step 2 -> Temperature / Duration of test		
Temperature variation per minute		

ZS4-SF-R Terminal Block Accessories Compatibility

Description	Type	Order Code	Pack ^(ing) pieces	Weight g (1 pce)	Technical Datasheet PDF
1 End Stops	BAM3	1SNK 900 001 R0000	50	13.80	1SNK 160 026 D0201
2 Jumper Bars	JB6-2	1SNK 906 302 R0000	50	1.30	1SNK 160 029 D0201
	JB6-3	1SNK 906 303 R0000	50	2.10	1SNK 160 029 D0201
	JB6-4	1SNK 906 304 R0000	50	2.90	1SNK 160 029 D0201
	JB6-5	1SNK 906 305 R0000	50	3.60	1SNK 160 029 D0201
	JB6-10	1SNK 906 310 R0000	20	7.40	1SNK 160 029 D0201
3 Test Adapters	TP2	1SNK 900 203 R0000	20	1.73	1SNK 160 036 D0201
	TP4	1SNK 900 205 R0000	20	2.42	1SNK 160 036 D0201
4 Test Connectors	TC5-R1	1SNK 900 201 R0000	10	5.23	1SNK 160 042 D0201
5 Spacers	ES-TC6	1SNK 900 105 R0000	10	0.80	1SNK 160 042 D0201
6 Tools	PS-3	1SNK 900 650 R0000	1	380.00	1SNK 160 024 D0201
7 Terminal Block Markers	MC612	1SNK 150 000 R0000	22	0.06	1SNK 160 006 D0201
	UMH	1SNK 900 611 R0000	10	0.20	1SNK 160 001 D0201
	PROCAP6	1SNK 900 612 R0000	20	0.79	1SNK 160 013 D0201
	SAT6	1SNK 900 615 R0000	5	6.00	1SNK 160 013 D0201